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The Vietnamese Version of the Brief Illness Perception Questionnaire and the Beliefs about Medicines Questionnaire: Translation and Cross-cultural Adaptation*

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ABSTRACT

Objective: To translate and cross-culturally adapt the Brief Illness Perception Questionnaire (BIPQ) and the Beliefs about Medicines Questionnaire (BMQ) into Vietnamese.

Methods: We followed the guideline by Beaton et al. (2000 & 2007). Stage I: two translators (informed and uninformed) translated the questionnaires. Stage II: the translations were synthesized. Stage III: back translation was performed by two translators fluent in both Vietnamese and English but naïve to the outcome measurement. Stage IV: seven experts reached consensus on the pre-final Vietnamese version (BIPQ-V and BMQ-V). Stage V: field test of the questionnaires on 16 twelve-year-old students and 31 Vietnamese patients. In addition, we determined the internal consistency and test-retest reliability of the questionnaires in 34 Vietnamese patients with acute coronary syndrome.

Results: All experts agreed that there was semantic, idiomatic, experiential, and conceptual equivalence between the original and pre-final Vietnamese versions of the BIPQ and BMQ. Cronbach's alpha coefficients of the internal consistency were acceptable for the BMQ-V Specific-Necessity (0.64), BMQ-V Specific-Concerns (0.62), and BMQ-V General-Harm (0.60), with the exception of BMQ-V General-Overuse (0.27). Intra-class correlation coefficients of the test-retest reliability was acceptable for the subscales of

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BMQ-V (range: 0.77-0.86), and BIPQ-V items (range: 0.62-0.85) with the exception of BIPQ-V 1 (0.44, 95% CI -014-0.72) and BIPQ-V 4 (0.57, 95% CI 0.22-0.81).

Conclusions: The Vietnamese version of BIPQ and BMQ are reliable tools to assess illness perceptions and beliefs about medicines of patients with acute coronary syndrome. Psychometric properties of these questionnaires should be tested in different patient populations.

Keywords: Translation, cross-cultural adaptation, illness perception, beliefs about medicines, Vietnamese

INTRODUCTION

Approximately half of all medicines prescribed for chronic conditions are not used as intended [1, 2]. Nonadherence to medicines has a considerable impact on patients' health outcomes (increasing morbidity and mortality) and the healthcare system (increasing use of services and hospital readmissions) [3, 4]. Many factors influence adherence, such as patient characteristics, medication class, physical comorbidities, pharmacy co-payments or medication costs, health/medication beliefs and provider communication [5].

Recent systematic reviews and meta-analyses showed a significant association between medication adherence and illness perception [6] and beliefs about medicines [7, 8]. Previous studies have also investigated associations between patients' outcomes (behavioral, quality-of-life, or physical health) and patients' illness perceptions [6], beliefs about medicines [7, 8], or medication adherence [9]. To assess these aspects, the Brief Illness Perception Questionnaire (BIPQ) [10] and the Beliefs about Medicines Questionnaire (BMQ) [11] are widely used in different languages and illness populations [6, 7, 12]. Both questionnaires were developed in English-speaking countries and have been translated and validated in different cultures [13-16].

To gain insight into patients' illness perceptions and beliefs about medicines, being able to assess these aspects across countries, translation and cross-cultural adaption of these questionnaires are needed [17, 18], but validated Vietnamese versions of the BIPQ and BMQ seem to be absent so far. Therefore we aimed to translate and cross-culturally adapt the BIPQ and BMQ into Vietnamese.

METHODS

We conducted the study in Can Tho city, Vietnam between September 2014 and June 2015. Participants involving in the study comprised healthcare and English language professionals, twelve-year-old students and patients with acute coronary syndrome (ACS) (Appendix A). The study was approved by the institutional review boards of Can Tho Central General Hospital and Can Tho General Hospital in Can Tho

City, Vietnam. Informed consent was obtained from all participants.

The BIPQ is a 9-item questionnaire designed to assess dimensions of illness perception. Five items assess cognitive illness representations: consequences (BIPQ 1), timeline (BIPQ 2), personal control (BIPQ 3), treatment control (BIPQ 4), and identity (BIPQ 5). Two items assess emotional representations: concern (BIPQ 6) and emotions (BIPQ 8). One item assesses illness comprehensibility (BIPQ 7). Responses are scored on a scale ranging from 0 to 10 [10]. The BMQ is an 18-item questionnaire designed to assess the cognitive representation of medication. It comprises two sections. The BMQ Specific assesses patients' beliefs about the particular medications prescribed for them, comprising two subscales: Specific Necessity and Specific Concerns. The BMQ General assesses more general beliefs about medicines as a whole, comprising two subscales: General Harm and General Overuse. Each item of the BMQ subscales is scored on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) [11].

The process of translation and cross-cultural adaptation of the BIPQ and BMQ is summarized in Figure 1. We followed the five stages of the guideline by Beaton et al. (2000 & 2007) [17, 18]:

Stage I – Initial Translation: The BIPQ and BMQ were independently translated from English into Vietnamese by two professionals fluent in English. One had a medical background and was aware of the study objective (informed translator), and the other had no medical background and was unaware of the study objective (uninformed translator). They produced two translations called T1 and T2.

Stage II – Synthesis of these Translations: The two translators synthesized the T1 and T2 translations and produced a T1&2 translation.

Stage III – Back Translation: Two back translators (fluent in both Vietnamese and English and without medical background) independently back-translated the T1&2 translation from Vietnamese into English and produced the BT1 and BT2 translations. The back translators were unaware of the original version of the BIPQ and BMQ and the study objective. Both were native Vietnamese speakers and proficient in English.

Stage IV – Expert Committee Review: The committee, consisting of seven experts (two methodologists, three translators, and two physicians), compared all versions of translations produced in the previous steps with the original version and agreed on the pre-final version of the BIPQ and BMQ in Vietnamese (called BIPQ-V and BMQ-V). The committee evaluated the equivalence between the original and the pre-final version in four aspects: semantic, idiomatic, experiential, and conceptual.

Stage V – Test of the Pre-Final Version: The pre-final version of the three questionnaires was tested on 16 twelve-year-old students of a secondary school in Vietnam and 31 patients with a history of acute coronary syndrome (ACS) (Appendix A). Participants were asked what they thought each questionnaire item meant. Based on the information, the researcher evaluated whether questionnaire

items were understood. Each interview required 20-30 minute to complete. All expert committee members reached consensus and produced the final version of the BIPQ-V and BMQ-V.

Stage VI – Testing Reliability of the Final Version: Consequently, we determined the reliability of the BIPQ-V and BMQ-V in 34 other patients with ACS and no cognitive impairment (with the score of the mini mental state examination score less than 18) (Appendix A). Three interviews were conducted with each included patient. The first interview was during hospitalization (using the BIPQ-V and BMQ-V), and the second one month after discharge (using the BIPQ-V and BMQ-V). The first interview took place in the study hospitals, and the second and the third in patients' homes. Each interview required 10-15 minutes to complete. We evaluated the internal consistency of the BIPQ-V and BMQ-V based on the first interview, and the test-retest reliability of the BIPQ-V and BMQ-V based on the first and second interview. The interval between the test and retest measures was one month. DNQ conducted all interviews at this stage.

Descriptive statistics were used to describe demographic and disease characteristics of the patients and their questionnaire scores. Percentages and frequencies were used for the categorical variables. Means and standard deviations were calculated for the continuous variables. The internal consistency for the BMQ-V Specific Necessity, BMQ-V Specific Concerns, BMQ-V General Overuse and BMQ-V General Harm was assessed by calculating Cronbach's alpha coefficients. Cronbach's alpha coefficients above 0.5 are generally considered acceptable. The corrected item-total correlation was also reported along with the alpha for each question [19]. The corrected item-total correlation coefficient value of < 0.2 indicates that the item contributes very little to the homogeneity of the scale [20]. The test-retest reliability of the BMQ-V Specific Necessity, BMQ-V Specific Concerns, BMQ-V General Overuse, BMQ-V General Harm, and the first eight items of BIPQ-V, was assessed using the intraclass correlation coefficients (ICCs) with 95% confidence interval (CI) of absolute agreement based on a two-way mixed model. ICCs above 0.60 are generally considered acceptable [21]. The significance level was set at p-values of 0.05 or less. All analyses were done in SPSS version 24.0.

RESULTS

Discrepancies between original and translations that were observed during the stages I to IV are summarised in Table 1. At stage IV, the expert panel agreed that there was semantic, idiomatic, experiential, and conceptual equivalence between original and pre-final translation version of the BIPQ and BMQ.

At stage V, we interviewed 16 twelve-year-old students (4 males, 12 females) and 31 patients with a history of acute coronary syndrome (25 males, 6 females; mean ± SD age 65.5 ± 8.6 years). The BIPQ-V

items were understood by an average of 99.3% of students and 96.4% of patients. The BMQ-V items were understood by an average of 99.3% students and 98.7% patients. The expert committee produced the final version of the BIPQ-V and BMQ-V (Appendix C).

At stage VI, 34 patients were included. Patients' mean ± SD age was 60.3 ± 7.7 years, 58.8% were males, and 85.3% had social health insurance. 97.1% of patients were Kinh ethnic, 82.4% were non-smokers, 52.9% had ≥ 3 comorbidities, 52.9% were financially dependent, 97.1% were independent of a caregiver. The level of education was <6th grade in 67.6%, and the MMSE score ≥24 in 88.2%.

Cronbach's alpha coefficients of the internal consistency were acceptable for the BMQ-V Specific Necessity (0.64), BMQ-V Specific Concerns (0.62), and BMQ-V General Harm (0.60), with the exception of BMQ-V General Overuse (0.27). The corrected item-total correlation coefficients' ranges were -0.09; 0.77 for the BMQ-V Specific Necessity, -0.06; 0.57 for the BMQ-V Specific Concerns, 0.01; 0.22 for the BMQ-V General Overuse, and 0.11; 0.52 for the BMQ-V General Harm (Table 2).

The ICCs of the test-retest reliability ranged between 0.44 (95% CI -0.14-0.72) and 0.85 (95% CI 0.70-0.93) for the eight items of BIPQ-V, and between 0.77 (95% CI 0.54-0.88) and 0.86 (95% CI 0.72-0.93) for the subscales of BMQ-V. The test-retest reliability was acceptable for BMQ-V Specific Necessity, BMQ-V Specific Concerns, BMQ-V General Overuse, BMQ-V General Harm, and BIPQ-V items, but not acceptable for BIPQ-V 1 and BIPQ-V 4 (Table 3).

DISCUSSION

The BIPQ-V and BMQ-V were translated and cross-culturally adapted from the original English versions BIPQ and BMQ. Our results suggest that the three questionnaires are reliable tools for assessing illness perception, beliefs about medicines and medication adherence in Vietnamese patients with ACS.

The results of test-retest reliability were acceptable for individual items of the BIPQ-V, with the exception of the items measuring consequences and treatment control (BIPQ-V 1 and BIPQ-V 4). The reason for low test-retest reliability of these two items was probably changes in patients' perceptions due to experiencing treatment effects in the time after discharge between hospitalization (first measure) and one month after discharge (the second measure). This should be considered in future studies.

A number of BMQ items were difficult to translate. For instance, the word "mystery" in the BMQ 8 item (My medicines are a mystery to me), that is "điều huyền bí" in the Vietnamese language refers to something that is difficult or impossible to understand or explain, or to something happening that cannot be explained scientifically. Researchers in Portugal [22] and Scandinavian countries [14] reported similar problems with this statement. Subscales of the BMQ-V had acceptable internal consistency (Cronbach's alpha = 0.60 to 0.64) and test-retest reliability (ICCs = 0.77 to 0.86), with the exception of the internal

consistency of the BMQ-V General Overuse (Cronbach's alpha = 0.27) which was lower than that of the original BMQ General Overuse (Cronbach's alpha = 0.60 to 0.80) [11]. There were three out of four questionnaire items of the BMQ-V General Overuse with the corrected item-total correlation coefficient values of < 0.2. These items contributed very little to the homogeneity of the subscale.

The cross-cultural adaptation of a health assessment scale in a new country, culture and/or language should reach equivalence between the original source and target languages [17, 18]. A systematic review by Uysal-Bozkir et al. [23] showed that cross-cultural adaptations were insufficient, and psychometric properties of many translated health assessment scales were still unknown. There are many different international guidelines for cross-cultural adaptation that could be used [23, 24]. The guideline by Beaton et al. [17, 18] has been recommended by the Institute for Work & Health and widely used [16, 25-28]. We followed all its stages for translation and cross-cultural adaptation and in addition assessed the cognitive status of participants prior to inclusion.

Several limitations should be considered in the present study. First, this study was performed by lecturers of pharmacy, medicine and English. We are not linguists, and therefore rely on our scientific research background and interest in the Vietnamese language. Second, as the paper is about illness perceptions and medicine beliefs a qualitative study conducted in advance would have been needed. Such perceptions and beliefs may be very different in the Vietnamese culture compared to other cultures where the instruments were developed and used. The considerable differences between two countries and cultures might contribute to moderate internal consistency of the scales. The other limitation is the small number of patients at the stage of testing reliability of the questionnaires. The weakness could have an impact on the findings. Further studies with more patients to validate these questionnaires should be conducted. This is just the first step to have the Vietnamese version of the scales; we suggest that more studies be conducted to test and confirm the psychometric properties of these scales in different patient groups and healthcare settings.

The findings support use of the three questionnaires in Vietnam. The country is facing a high burden of acute coronary syndrome as well as other chronic conditions. More research on the psychometric properties of the BIPQ-V and BMQ-V in Vietnamese patients with ACS or other chronic conditions is needed. Further work should also be carried out to identify the association between illness perception, beliefs about medicine, medication adherence and patients' health outcomes among Vietnamese patients as previous studies in other countries [29-34].

CONCLUSION

The BIPQ-V and BMQ-V can be applied as reliable tools for assessing illness perception and beliefs about

medicines of patients with ACS. Further studies are needed to validate the psychometric properties of these questionnaires in patients with different chronic conditions in different clinical settings.

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Table 1. Report of main discrepancies between original and Vietnamese/back-translated version of the three questionnaires and solutions during stages I to IV

Questionnaire item	Discrepancy	Solution
BIPQ 5: How much do you experience symptoms from your illness?	There is no equivalent word of "experience" in Vietnamese in the context.	We translated "experience" into "be aware of" in Vietnamese.
BMQ 8: My medicines are a mystery to me.	There is no equivalent word of "mystery" in Vietnamese in the context.	We translated "mystery" into "something is not fully understood" in Vietnamese.
BMQ 11: Doctors use too many medicines.	It might be misunderstood as "Doctors use too many medicines for themselves".	We specified "doctors use too many medicines for patients" and not for the other objects and not for themselves (doctors).
BMQ 12: Natural remedies are safer than medicines.	The word "medicine" is a term with broad meaning, probably something to cure an illness.	We specify that it is similar to "synthesized medicines" or "modern medicines" to be distinguished from "natural remedies".

Abbreviations: BIPQ, Brief Illness Perception Questionnaire; BMQ, Beliefs about Medicines Questionnaire.

Table 2. Internal consistency of the BMQ-V

Questionnaire item	Mean ± SD	Corrected item-total correlation	Cronbach's alpha if item deleted
BMQ-V Specific-Necessity: Cronbach's alpha was 0.64 for the total subscale			
BMQ-V 1	4.87 ± 0.44	0.45	0.57
BMQ-V 2	4.88 ± 0.48	0.72	0.45
BMQ-V 3	4.79 ± 0.59	0.62	0.47
BMQ-V 4	4.85 ± 0.50	0.77	0.42
BMQ-V 5	4.79 ± 0.85	-0.09	0.89
BMQ-V Specific-Concerns: Cronbach's alpha was 0.62 for the total subscale			
BMQ-V 6	2.26 ± 1.86	0.33	0.59
BMQ-V 7	3.15 ± 1.86	0.43	0.54
BMQ-V 8	4.85 ± 0.70	-0.06	0.68
BMQ-V 9	3.26 ± 1.94	0.57	0.45
BMQ-V 10	3.35 ± 1.92	0.51	0.49
BMQ-V General-Overuse: Cronbach's alpha was 0.27 for the total subscale			
BMQ-V 11	2.21 ± 1.57	0.15	0.19
BMQ-V 12	3.21 ± 1.77	0.18	0.15
BMQ-V 13	4.09 ± 1.29	0.01	0.35
BMQ-V 14	3.88 ± 1.12	0.22	0.14
BMQ-V General-Harm: Cronbach's alpha was 0.603 for the total subscale			
BMQ-V 15	1.97 ± 1.53	0.11	0.70
BMQ-V 16	2.59 ± 1.89	0.45	0.48
BMQ-V 17	2.32 ± 1.75	0.52	0.43
BMQ-V 18	2.79 ± 1.94	0.48	0.45

Abbreviations: BMQ-V, Beliefs about Medicines Questionnaire - Vietnamese version; SD, standard deviation.

Table 3. Mean scores and test-retest reliability of the BIPQ-V and BMQ-V

Questionnaire item	First measure[a] Mean ± SD	Second measure[b] Mean ± SD	Test-retest reliability		
			ICC	95% CI	p-value
BIPQ-V 1	5.71 ± 2.81	5.76 ± 2.88	0.44	-0.14 - 0.72	0.055
BIPQ-V 2	9.00 ± 2.61	9.53 ± 1.91	0.84	0.69 - 0.92	**<0.001**
BIPQ-V 3	5.18 ± 3.03	5.41 ± 3.15	0.78	0.55 - 0.89	**<0.001**
BIPQ-V 4	7.21 ± 1.87	6.97 ± 2.18	0.57	0.13 - 0.78	**0.010**
BIPQ-V 5	3.21 ± 3.08	3.15 ± 2.72	0.62	0.22 - 0.81	**0.004**
BIPQ-V 6	7.44 ± 3.11	6.85 ± 3.66	0.85	0.70 - 0.93	**<0.001**
BIPQ-V 7	6.29 ± 3.05	4.97 ± 4.00	0.64	0.29 - 0.82	**0.001**
BIPQ-V 8	3.50 ± 3.54	4.26 ± 3.73	0.63	0.27 - 0.82	**0.003**
BMQ-V Specific-Necessity	24.18 ± 1.88	24.35 ± 2.20	0.86	0.71 - 0.93	**<0.001**
BMQ-V Specific-Concerns	16.88 ± 5.44	17.44 ± 5.41	0.77	0.54 - 0.88	**<0.001**
BMQ-V General-Overuse	13.38 ± 3.27	14.29 ± 3.08	0.81	0.62 - 091	**<0.001**
BMQ-V General-Harm	9.68 ± 4.82	9.79 ± 4.54	0.86	0.72 - 0.93	**<0.001**

Abbreviations: BIPQ-V, Brief Illness Perception Questionnaire - Vietnamese version; BMQ-V, Beliefs about Medicines Questionnaire - Vietnamese version; ICC, intra-class correlation coefficient; SD, standard deviation.

[a]Using BIPQ and BMQ during hospitalization;

[b]Using BIPQ and BMQ at one month after discharge.

Legend to Figure (In separate file)

Figure 1. Process of translation and cross-cultural adaptation

Abbreviations: BIPQ, Brief Illness Perception Questionnaire; BIPQ-V, Brief Illness Perception Questionnaire - Vietnamese version; BMQ, Beliefs about Medicines Questionnaire; BMQ-V, Beliefs about Medicines Questionnaire - Vietnamese version.

Legends to APPENDICES (in separate file)

Appendix A. Characteristics of participants in the study

Appendix B. Understanding items of the pre-final version of the BIPQ and BMQ in twelve-year-old students and pilot patients

Appendix C. The BIPQ-V and BMQ-V

APPENDICES A-C

Appendix A. Characteristics of participants in the study

Participant	Description
Healthcare and English language professionals	There were nine professionals involving in six stages of the study: TN and STP were clinical pharmacists and lecturers at Can Tho University of Medicine and Pharmacy, Can Tho City, Vietnam; HTKC, KKL, and TTP were medical doctors and lecturers at Can Tho University of Medicine and Pharmacy; DNQ was the last year pharmacy student at Can Tho University of Medicine and Pharmacy; SXA was an English language lecturer at Can Tho University of Medicine and Pharmacy; THN was a clinical pharmacist and lecturer of University of Medicine and Pharmacy, Ho Chi Minh City, Vietnam; KT was a clinical pharmacist and lecturer at University of Groningen, Groningen City, The Netherlands. We also invited two English language lecturers (MTTN and HTN) at Can Tho University of Medicine and Pharmacy.
Twelve-year-old students	At stage V, we interviewed at least 15 twelve-year-old students at a secondary school in Vietnam in November 2014.
Pilot patients	At stage V, the pre-final version of the BIPQ and BMQ in Vietnamese were administered to at least 30 patients with a history of acute coronary syndrome at the central hospital in Can Tho in December 2014. All patients were asked for the verbal informed consent before the interview.
Patients for testing reliability	At stage VI, we recruited all eligible patients discharged from two hospitals (one central and one provincial) in Can Tho between January and April 2015 and followed them for two months after discharge. The study ended in June 2015. We included patients who were living in Can Tho City with one of the following discharge diagnoses according to the coding of the International Classification of Diseases, 10th revision (ICD-10): unstable angina (I20.0), acute myocardial infarction (I21) or subsequent myocardial infarction (I22). We excluded patients (1) who were unable to communicate in Vietnamese; (2) who had cognitive impairment (with the score of the mini mental state examination score less than 18); and (3) who died or moved away from Can

	Tho City within one month after discharge. Each participant understood the study objective and voluntarily signed an informed consent form. We guaranteed the participants' confidentiality and anonymity.

Appendix B. Understanding items of the pre-final version of the BIPQ and BMQ in twelve-year-old students and pilot patients

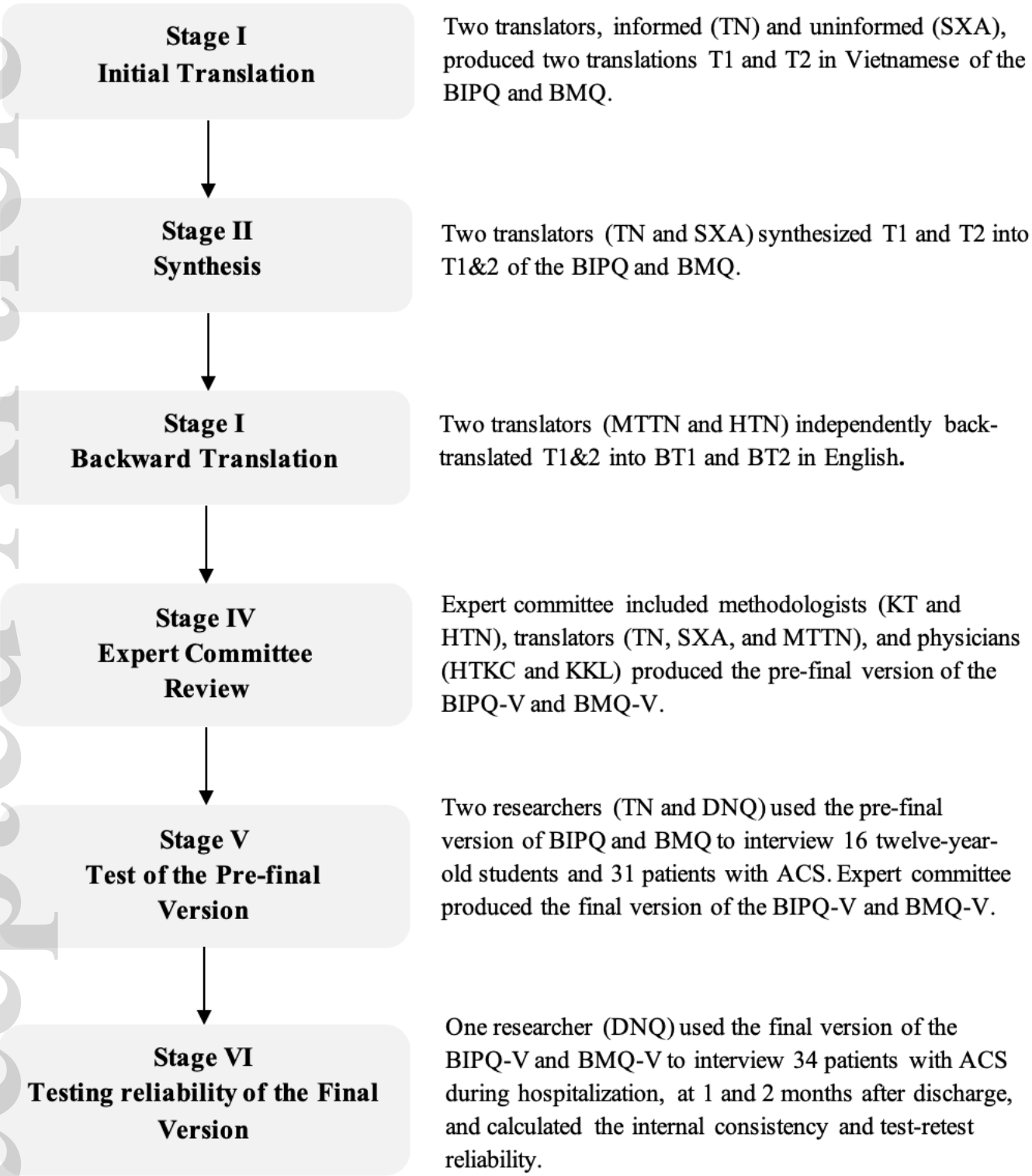
Questionnaire item	Twelve-year-old students N = 16, n (%)		Pilot patients N = 31, n (%)	
BIPQ 1	16	(100)	31	(100)
BIPQ 2	16	(100)	30	(96.8)
BIPQ 3	16	(100)	29	(93.5)
BIPQ 4	16	(100)	31	(100)
BIPQ 5	15	(93.8)	29	(93.5)
BIPQ 6	16	(100)	29	(93.5)
BIPQ 7	16	(100)	30	(96.8)
BIPQ 8	16	(100)	29	(93.5)
BIPQ 9	16	(100)	31	(100)
Average of BIPQ items	***15.89***	***(99.3)***	***29.89***	***(96.4)***
BMQ 1	15	(93.8)	31	(100)
BMQ 2	16	(100)	31	(100)
BMQ 3	16	(100)	31	(100)
BMQ 4	16	(100)	31	(100)
BMQ 5	16	(100)	31	(100)
BMQ 6	16	(100)	28	(90.3)
BMQ 7	16	(100)	31	(100)
BMQ 8	16	(100)	31	(100)
BMQ 9	16	(100)	31	(100)
BMQ 10	16	(100)	31	(100)
BMQ 11	16	(100)	31	(100)
BMQ 12	15	(93.8)	31	(100)
BMQ 13	16	(100)	30	(96.8)
BMQ 14	16	(100)	28	(90.3)
BMQ 15	16	(100)	31	(100)
BMQ 16	16	(100)	31	(100)
BMQ 17	16	(100)	31	(100)
BMQ 18	16	(100)	31	(100)
Average of	***15.89***	***(99.3)***	***30.61***	***(98.7)***

BMQ items				

Appendix C. The BIPQ-V and BMQ-V

Number	Questionnaire item in Vietnamese
The Vietnamese version of the Brief Illness Perception Questionnaire (BIPQ-V)	
BIPQ 1	Bệnh ảnh hưởng đến cuộc sống của bạn ở mức độ nào?
BIPQ 2	Bạn nghĩ bệnh của bạn còn kéo dài bao lâu nữa?
BIPQ 3	Bạn cảm thấy bạn có khả năng kiểm soát bệnh của bạn ở mức độ nào?
BIPQ 4	Bạn nghĩ việc điều trị giúp ích cho bệnh của bạn ở mức độ nào?
BIPQ 5	Bạn cảm nhận các triệu chứng bệnh của bạn ở mức độ nào?
BIPQ 6	Bạn quan tâm về bệnh của bạn ở mức độ nào?
BIPQ 7	Bạn cảm thấy bạn hiểu về bệnh của bạn rõ như thế nào?
BIPQ 8	Bệnh ảnh hưởng đến cảm xúc của bạn ở mức độ nào? (ví dụ, nó có làm bạn tức giận, sợ hãi, bực bội hay chán nản)
BIPQ 9	Vui lòng liệt kê theo trình tự mức độ quan trọng ba nguyên nhân mà bạn nghĩ gây ra bệnh của bạn. Các nguyên nhân quan trọng nhất là?
The Vietnamese version of the Beliefs about Medicines (BMQ-V)	
BMQ 1	Sức khỏe của tôi hiện tại phụ thuộc vào thuốc.
BMQ 2	Cuộc sống của tôi không thể không có thuốc.
BMQ 3	Không có thuốc tôi sẽ cảm thấy rất không khỏe.
BMQ 4	Sức khỏe của tôi trong tương lai sẽ phụ thuộc vào thuốc.
BMQ 5	Thuốc bảo vệ tôi không tiến triển bệnh nặng hơn.
BMQ 6	Phải uống thuốc làm tôi lo lắng.
BMQ 7	Thỉnh thoảng tôi lo lắng về ảnh hưởng của thuốc khi sử dụng lâu dài.
BMQ 8	Tôi vẫn chưa hiểu hết về các thuốc mình đang dùng.
BMQ 9	Thuốc gây bất tiện cho cuộc sống của tôi.
BMQ 10	Thỉnh thoảng tôi lo lắng trở nên quá phụ thuộc vào thuốc.
BMQ 11	Bác sĩ sử dụng quá nhiều thuốc cho bệnh nhân.
BMQ 12	Các phương thuốc dân gian trong tự nhiên an toàn hơn thuốc tân dược.
BMQ 13	Bác sĩ đặt quá nhiều tin cậy vào thuốc.
BMQ 14	Nếu bác sĩ có nhiều thời gian với bệnh nhân hơn, họ sẽ kê đơn ít thuốc hơn.
BMQ 15	Những người đang dùng thuốc nên thỉnh thoảng tạm ngưng điều trị một thời gian ngắn.
BMQ 16	Hầu hết các thuốc đều gây nghiện.
BMQ 17	Thuốc có hại nhiều hơn lợi.
BMQ 18	Hầu hết các thuốc là chất độc.

Abbreviations: BIPQ, Brief Illness Perception Questionnaire; BMQ, Beliefs about Medicines Questionnaire.



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